

MySQL for Database Administrators Ed 4 NEW

Duration: 5 Days

What you will learn

The MySQL for Database Administrators course teaches DBAs and other database professionals how to maximize their organization's investment in MySQL and about the benefits of using the MySQL Cloud Service. Learn to configure the MySQL Server, set up replication and security, perform database backups, optimize query performance, and ensure high availability.

Through a variety of realistic, hands-on activities, expert MySQL instructors will teach you to install, configure, secure, and maintain your database server which you can deploy on premise or as a MySQL Cloud Service instance.

Learn To:

- Install and configure MySQL Server and client programs.
- Recognize the key components of the MySQL architecture.
- Secure your server.
- Troubleshoot server slowdowns and other issues.
- Improve query performance.
- Configure and administer a variety of replication topologies.
- Understand the benefits of MySQL Cloud.

Benefits to You:

After taking this course, you will be equipped to use all the features of MySQL to get the best out of your Web, Cloud, and embedded applications, whether you work with the command line or graphical tools such as MySQL Workbench and MySQL Enterprise Monitor, whether you use on premise or MySQL Cloud-based instances, and whether your challenge is complex replication requirements, or highly-tuned transactional systems.

Audience

- Database Administrators
- Database Developers
- Technical Consultant

Related Training

Required Prerequisites

- Should be knowledgeable with Joining tables
- Should be knowledgeable with MySQL data types and executing basic DDL and DML queries using SQL
- Should be knowledgeable with relational database concepts and using the my sql command-line client

MySQL Fundamentals Ed 1

Suggested Prerequisites

- MySQL for Developers

EZY Intellect Pte. Ltd.,

#1 Changi North Street 1, Singapore – 498789. www.ezyintellect.com

CAMBODIA | SRILANKA | LAOS | MYANMAR | VIETNAM | PHILIPPINES | BANGLADESH | PAKISTAN |

MySQL for Developers Ed 2

MySQL for Developers Ed 3

Course Objectives

- Define and implement a backup strategy
- Perform physical and logical backups of your data
- Describe MySQL replication and its role in high availability and scalability
- Configure simple and complex replication topologies
- Administer a replication topology
- Install the MySQL server and client programs
- Upgrade MySQL on a running server
- Describe MySQL architecture
- Explain how MySQL processes, stores, and transmits data
- Configure MySQL server and client programs
- Use server logs and other tools to monitor database activity
- Create and manage users
- Protect your data from common security risks
- Identify and optimize poorly-performing queries
- Troubleshoot server slowdowns and other common problems
- Gain an understanding of MySQL Cloud

Course Topics

Introduction to MySQL

- MySQL overview
- MySQL Enterprise Edition
- MySQL on the Web
- MySQL in the Cloud
- The MySQL community

Installing MySQL

- Installing MySQL
- Installed Files and Directories
- Initial Configuration
- Starting and Stopping MySQL
- Upgrading MySQL

MySQL Architecture

- Architectural Overview
- How MySQL Transmits Data
- How MySQL Processes Requests

How MySQL Stores Data
Tablespaces
Redo and Undo Logs
How MySQL Uses Memory
Plug-in Interface

Configuring MySQL

Server Options, Variables, and the Command Line
Option Files
System Variables
Launching Multiple Servers on the Same Host

Monitoring MySQL

Monitoring MySQL with Log Files
Monitoring MySQL with Status Variables
Monitoring MySQL with Performance Schema
MySQL Enterprise Audit
MySQL Enterprise Monitor
Monitoring User Activity

User Management

MySQL Privilege System
Creating and Modifying User Accounts
Configuring Passwords and Account Expiration
Authentication Plug-Ins
Granting Permissions
Grant Tables
Resetting a Forgotten Root Password

MySQL Security

Security Risks
Network Security
Secure Connections
Password Security
Operating System Security
Protecting Against SQL Injections
MySQL Enterprise Firewall

Maintaining a Stable System

Stability
Why Databases Fail
Capacity Planning

Troubleshooting
Identifying the Causes of Server Slowdowns
InnoDB Recovery

Optimizing Query Performance

Identifying Slow Queries
The EXPLAIN statement
Working with Indexes
Index Statistics

Backup Strategies

Understanding Backups
Backup Techniques
Creating a Backup Strategy

Performing Backups

MySQL Backup Tools
Raw Backup Methods
Techniques that Use the Binary Log

Configuring a Replication Topology

Overview of Replication
Replication Conflicts
When to Use Replication
Configuring Replication

Administering a Replication Topology

Failover
MySQL Utilities
Replication Threads
Monitoring Replication
Troubleshooting Replication

Group Replication

Overview
Single-Primary and Multi-Primary Modes
Configuring Group Replication
Monitoring Group Replication